



AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005

4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID : CP-2018-01-11-04 Date: 13-01-18

Customer : Assistant Executive Engineer, T.Dasarahalli Sub Division, BBMP, Bangalore.

Address : T.Dasarahalli Sub Division, BBMP, Bangalore.

Project Name : Construction of RCC drains and Improvements to road at Grape Garden Main road T.Dasarahalli ward No.15.

Agency : Technical Manger(West), KRIDL, Project Implementation Unit, No.280, 59th Cross, 17th 'C' Main Road, 3rd 'Y' Block, Rajajinagar, Bangalore-560 010

Customer's Reference : BBMP/EE/DD/WO/183/2017-18

Source of Sample : Sample supplied by Agency

Sample condition : Satisfactory

Date of Receipt : 11-01-18

Sample ID No : 2018-01-11-04/02(a)

Sample Type : 40mm down size coarse aggregate

Reference to BIS codes : IS: 383:2016 (Specification for Coarse and fine Aggregates)
IS: 2386 :1963(Part - 1,3,4) RA2011
IS 2386 Part 1: Particle Size and Shape
IS 2386 Part 3: Specific gravity, Density, Voids, Water Absorption
IS 2386 Part 4: Mechanical Properties

Date of test : 11-01-18

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 40MM DOWN COARSE AGGREGATE:

Total weight taken : 15000 grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	80 mm	0	0	0.0	100	100
2	40 mm	255	255	1.7	98.3	90-100
3	20 mm	5443	5698	38.0	62.0	30-70
4	10 mm	4766	10464	69.8	30.2	10-35
5	4.75 mm	4234	14698	98.0	2.0	0-5
6	Pan	302	15000	100.0	0	---

Signature of the Engineer
B. Dasarahalli Sub Division

Page 1/2



M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL |
GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |



AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005

4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID : CP-2018-01-11-04

Date: 13-01-18

Sample ID No : 2018-01-11-04/02(a)

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	11.7	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	10.4	
3	Specific Gravity	2.69	—
4	Bulk Density(Loose) (Kg/l)	1.46	—
5	Bulk Density(Compacted) (Kg/l)	1.49	—
6	Water Absorption(%)	0.22	—

Note:

The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

Sk. Dayar
ಕಾರ್ಯದರ್ಶಿ, ಕಾರ್ಯಪಾಲಕ ಅಧೀನದಲ್ಲಿ
ಪಿ.ದಾಸರವಳ್ಳಿ ಉಪ-ವಿಭಾಗ
ಬಾಗಲಗುಂಟೆ, ಬಿಜಿಎಂಪಿ
ಬೆಂಗಳೂರು



FOR CIVIL Pro.

R. Karthik Rechan
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 2/2

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL
GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID	:	CP-2018-01-11-04	Date: 13-01-18
Customer	:	Assistant Executive Engineer, T.Dasarahalli Sub Division, BBMP, Bangalore.	
Address	:	T.Dasarahalli Sub Division, BBMP, Bangalore.	
Project Name	:	Construction of RCC drains and Improvements to road at Grape Garden Main road T.Dasarahalli ward No.15.	
Agency	:	Technical Manger(West), KRIDL, Project Implementation Unit, No.280, 59th Cross, 17th 'C' Main Road, 3rd 'Y' Block, Rajajinagar, Bangalore-560 010	
Customer Reference	:	BBMP/EE/DD/WO/183/2017-18	
Source of Sample	:	Sample supplied by Agency	
Sample Condition	:	Satisfactory	
Date of Receipt	:	11-01-18	
Sample ID No	:	2018-01-11-04/02(b)	
Sample Type/ Size	:	20mm down size coarse aggregate	
Reference to BIS codes	:	IS: 383:2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1,3,4) RA2011 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids, Water Absorption IS 2386 Part 4: Mechanical Properties	
Date of test	:	11-01-18	

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:

Total weight taken : 5000 grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	40 mm	0	0	0	100	100
2	20 mm	254	254	5.1	94.9	90-100
3	10 mm	2674	2928	58.6	41.4	25-55
4	4.75 mm	1789	4717	94.3	5.7	0-10
5	Pan	283	5000	100	0	—

Page 1/2



M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL
GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |



AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005

4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID : CP-2018-01-11-04

Date: 13-01-18

Sample ID No : 2018-01-11-04/02(b)

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	12.4	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	11.5	
3	Specific Gravity	2.65	—
4	Bulk Density(Loose) (Kg/l)	1.54	—
5	Bulk Density(Compacted) (Kg/l)	1.56	—
6	Water Absorption(%)	0.24	—
7	Aggregate crushing Value(%)	22.5	Max 30% for Aggregates to be used in concrete for wearing Surface, In case Aggregate Crushing Value Exceeds 30% then the test for ten percent fines should be conducted for Aggregates to be used in concrete other than for wearing Surface.
8	Aggregate Impact Value(%)	21.9	30% for Aggregates to be used in concrete for wearing Surface, 45% for Aggregates to be used in concrete other than for wearing Surface.

Note:

The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

Signature
ಬಿ.ದಾಸರವಳ್ಳಿ ಉಪ-ನಿರ್ದೇಶಕರು
ಬಾಗಲಗುಂಪಿ, ಬಿಬಿಎಂಪಿ
ಬೆಂಗಳೂರು



FOR CIVIL Pro.

Signature
R KARTHIK RECHAN
Authorized Signature
Quality Manager

Page 2/2
End of Report

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL
GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |



AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005

4, 7TH MAIN MALLESWARAM, BANGALORE - 3

Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT OF FINE AGGREGATE

Lab ID : CP-2018-01-11-04 Date: 13-01-18

Customer : Assistant Executive Engineer, T.Dasarahalli Sub Division, BBMP, Bangalore.

Address : T.Dasarahalli Sub Division, BBMP, Bangalore.

Project Name : Construction of RCC drains and Improvements to road at Grape Garden Main road T.Dasarahalli ward No.15.

Agency : Technical Manger(West), KRIDL, Project Implementation Unit, No.280, 59th Cross, 17th 'C' Main Road, 3rd 'Y' Block, Rajajinagar, Bangalore-560 010

Customer's Reference : BBMP/EE/DD/WO/183/2017-18

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 11-01-18

Sample ID No : 2018-01-11-04/03

Sample Type : Fine Aggregate

Reference to BIS codes : IS 383 : 2016 (Specification for Coarse and fine Aggregates)
IS: 2386 :1963(Part - 1, 3) RA2012
IS 2386 Part 1: Particle Size and Shape
IS 2386 Part 3: Specific gravity, Density, Voids, Water Absorption

Date of test : 11-01-18

Total weight taken : 1000 grams

Sl.no	Sieve Size	Weight Retained (gms)	Cumulative Weight Retained (gms)	% Cumulative Weight Retained	% Passing	Requirement as per IS 383:2016			
						Grading Zone I	Grading Zone II	Grading Zone III	Grading Zone IV
1	10 mm	0	0	0.0	100.0	100	100	100	100
2	4.75 mm	85	85	8.5	91.5	90-100	90-100	90-100	95-100
3	2.36 mm	154	239	23.9	76.1	60-95	75-100	85-100	95-100
4	1.18 mm	166	405	40.5	59.5	30-70	55-90	75-100	90-100
5	600 micron	179	584	58.4	41.6	15-34	35-59	60-79	80-100
6	300 micron	174	758	75.8	24.2	5-20	8-30	12-40	15-50
7	150 micron	153	911	91.1	8.9	0-10	0-10	0-10	0-15
8	Pan	89	1000	100.0	0.0	---	---	---	---

Result : The tested Sample Conforms to Grading Zone II

Page 1/2

Signature
ಕರ್ನಾಟಕ ರಾಜ್ಯದ ಸರ್ಕಾರ
ಬಿ.ಎಸ್.ಎಸ್. ಸರ್ಕಾರ
ಬೆಂಗಳೂರು, ಕೆ.ಆರ್.ನಗರ



Signature

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL
GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |



AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005

4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

TEST REPORT OF FINE AGGREGATE

Lab ID : CP-2018-01-11-04

Date: 13-01-18

Sample ID No : 2018-01-11-04/03

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS 383:2016
1	Water Absorption(%)	1.6	—
2	Specific Gravity	2.58	—
3	Material finer than 75 micron(%)	4.9	Uncrushed fine Aggregate Max 3%, Crushed Fine aggregate Max 15%, Mixed Fine aggregate Max 12%, Manufactured Fine aggregate Max 10%

Note:

The results pertain to the samples received and tested.

All information furnished by Customer/Representative

Any correction in the report will make this report invalid

This report without prior written approval should not be reproduced or published in full or part.

Samples will be disposed after 90 days from the date of issue of test certificate

Signature
ಕಾರ್ಯಕರಣಾಂಗದ ಅಧ್ಯಕ್ಷರು
ಟಿ.ದಾಸರಾಜ್, ಮಹಾ-ವಿಭಾಗ
ಬಾಗಲಗುಂಟೆ, ಬೆಂಗಳೂರು
ಜಿಲ್ಲಾಕೋಟೆ



FOR CIVIL Pro.

Signature

R KARTHIK RECHAN

Authorized Signatory

Quality Manager

Page 2/2

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL

GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |



AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005

4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID : CP-2018-01-11-04 Date: 13-01-18
 Customer : Assistant Executive Engineer, T.Dasarahalli Sub Division, BBMP, Bangalore.
 Address : T.Dasarahalli Sub Division, BBMP, Bangalore.
 Project Name : Construction of RCC drains and Improvements to road at Grape Garden Main road T.Dasarahalli ward No.15.
 Agency : Technical Manger(West), KRIDL, Project Implementation Unit, No.280, 59th Cross, 17th 'C' Main Road, 3rd 'Y' Block, Rajajinagar, Bangalore-560 010
 Customer's Reference : BBMP/EE/DD/WO/183/2017-18
 Source of Sample : Sample supplied by Agency
 Sample Condition : Satisfactory
 Date of Receipt : 11-01-18
 Sample ID No : 2018-01-11-04/01
 Sample Type : Birla Super 53grade
 Reference to BIS codes : IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification ,
 IS 4031 (Part 1,2 3,4,5, 6,11):1988
 IS 4031 Part 1 DETERMINATION OF FINENESS BY DRY SIEVING, Clause 4.4
 IS 4031 Part 2, Determination of Fineness by Blaine Air Permeability Method, Clause 5
 IS 4031 Part 3, Determination of Soundness, Clause 5, Clause 6
 IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5
 IS 4031 Part 5, Determination of Initial & Final Setting Time, Clause 5
 IS 4031 Part 11, DETERMINATION OF DENSITY , Clause 6
 Date of test : 12-01-18

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	Fineness by dry sieving (%)	1.15	—
2	Finess by Air permeablity method (m ² /kg, Min)	277.3	225m ² /kg, Min
3	Density (gm/cc)	3.14	—
4	Standard Consistency (%)	27.5%	Not specified
5	Initial Setting time	175 minutes	Not less than 30 minutes
6	Final Setting time	270 minutes	Not more than 600 minutes
7	Soundness (Le Chatelier's Method)	2mm	Not more than 10 mm

Note:

The results pertain to the samples received and tested.

All information furnished by Customer/Representative

Any correction in the report will make this report invalid

This report without prior written approval should not be reproduced or published in full or part.

Samples will be disposed after 90 days from the date of issue of test certificate

Signature
 *****End of Report*****



FOR CIVIL Pro.

Signature

R KARTHIK RECHAN

Authorized Signatory

Quality Manager

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL |
 GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |



AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005

4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID : CP-2018-01-11-04 Date: 09-02-18

Customer : Assistant Executive Engineer, T.Dasarahalli Sub Division, BBMP, Bangalore.

Address : T.Dasarahalli Sub Division, BBMP, Bangalore.

Project Name : Construction of RCC drains and Improvements to road at Grape Garden Main road T.Dasarahalli ward No.15.

Agency : Technical Manger(West), KRIDL, Project Implementation Unit, No.280, 59th Cross, 17th 'C' Main Road, 3rd 'Y' Block, Rajajinagar, Bangalore-560 010

Customer's Reference : BBMP/EE/DD/WO/183/2017-18

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 11-01-18

Sample ID No : 2018-01-11-04/01

Sample Type : Birla Super 53grade

Reference to BIS codes : IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification ,
IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5
IS 4031 Part 6, Determination of Compressive Strength, Clause 6

Date of test : 12-01-18

Compressive Strength			
Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	3 Days	27.5N/mm ²	Not less than 27 N/mm ²
2	7 Days	38.0N/mm ²	Not less than 37 N/mm ²
3	28 Days	54.5N/mm ²	Not less than 53 N/mm ²

Note:

The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

(Signature)
ಕರ್ತವ್ಯ ಕಾರ್ಯಪಾಲಕ ಅಧಿಕಾರಿ
ಟಿ.ದಾಸರಾಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ
ಬಾಗಲಗುಂಟೆ, ಬಿಬಿಎಂಪಿ
ಬೆಂಗಳೂರು
Page 1/1
****End of Report****



FOR CIVIL Pro.
(Signature)
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL
GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |